

UNIVERSITY OF CALIFORNIA.

AGRICULTURAL EXPERIMENT STATION.

BULLETIN NO. 11.

[In order to render the results of investigations and experiments conducted by the Agricultural Department of the University of California more quickly and more generally available than has heretofore been done through the annual or biennial reports, it is proposed to embody hereafter, in the form of "Bulletins," to be issued as often as may seem desirable, reports of results, as well as such other discussions, information or answers to questions as may be of general interest. It is intended to make these bulletins, as a rule, short enough for insertion in the daily or weekly papers of the State, and proof-slips of the same will be regularly mailed to papers applying therefor. The substance of these bulletins will ultimately be embodied in a more complete and connected form, in the annual reports of the College of Agriculture.]

Concerning the Census Report "On the Physical and Agricultural Features of California."

Inasmuch as copies of the above report on California, forming part of the census report on cotton production* are now coming before the public, it is desirable that the origin of that report, and especially the extent of its claims to accuracy and completeness, should be fully understood.

From the time that the writer took charge of the agricultural department of the University, it has been his steady aim to obtain as complete a knowledge as possible of the agricultural features of the State; it being his conviction that truly practical and useful instruction in agriculture is that which is illustrated by the examples and facts that have come before the students at their homes, or with which they will have to deal in the agricultural practice of their own State hereafter. Moreover it is manifest that a full and authentic description of a State is of the greatest importance to the immigrants or settlers seeking a new home, as well as to the farmers and capitalists desiring to locate or invest to the best possible advantage, who naturally distrust the *ex parte* statements of interested parties.

The usual and best mode of obtaining such information is an agricultural survey, systematically and fully carried out; but all efforts to revive, to that extent, the old geological survey, or to obtain means for the prosecution of such work from the State, have thus far proved unavailing. Up to 1880 the only means at command for such purposes was an appropriation of \$250 made by the board of regents in 1875; a part of which was expended in visiting, on special occasions, points, or meetings of par-

ticular interest at the time. Beyond this, every other opportunity for personal travel was utilized for observation, and a growing correspondence with intelligent farmers in various parts of the State furnished local information of value in mapping out the general features. The work, however, progressed very slowly and unsatisfactorily until in 1879, the writer was requested by the superintendent of the census to undertake the general supervision and editing of the report on cotton production in the United States, including more or less detailed descriptions of the several States. To this after some hesitation he agreed, provided he were to be permitted to treat California as one of the virtually, if not actually, cotton-growing States. This being agreed to by superintendent Walker, it became practicable to visit, either personally or by deputy, some of the agriculturally most important portions of the State, in so far as they might become of consequence in connection with cotton production. As in the case of other States, a certain expenditure for clerical, chemical, and other work was authorized, and thus were furnished the means for collecting and elaborating the material for a description of the natural features of California, that lay scattered in numerous publications, largely of a transient nature, as well as in manuscripts, letters, etc. Doubtful points of special importance were elucidated by correspondence. Most important assistance was rendered by the authorities of the C. P. R. R., at the request of the superintendent of the census, and under the initiative of the late B. B. Redding, by the detailing of an intelligent young engineer, Mr. N. J. Willson, who made observations and collected soil specimens along the main line of the road from Redding to Bakersfield, furnishing notes, both of observations made by himself, and of information gathered from the resident farming population.

It was no easy task to combine into a readable and consistent whole, the scattered material thus brought together and often presenting contradictory and exaggerated statements requiring to be sifted out. Nor was it possible to give more than general credit to all the sources of information drawn upon, without going to intolerable lengths. It was also obviously necessary to confine the report to those features which, in the nature of things, are essentially unchangeable. However desirable it might have been for practical purposes to go somewhat beyond these limits and give some data regarding the chief towns and settlements, the rapid mutability of such matters in the United States, and the difficulty of avoiding *ex parte* statements and invidious comparisons,

* Appendix to vol. 6 of the final reports of the Tenth Census, with an agricultural map of the State, issued in April, 1884.

with their train of wounded sensibilities and interests, rendered such additions clearly inexpedient. It should therefore be fully understood that the omission of such matters is intentional and general throughout the series of reports, of which the one under consideration forms a part.

Under the circumstances surrounding the compilation of the report on California, it cannot be claimed, nor can it reasonably be expected, that mistakes have been entirely avoided and no important omissions made. On the contrary, it is quite certain that in the latter respect a great deal is left to be desired, and that, in fact, the present publication can be considered only as the groundwork upon which a more thorough and correct hand-book of the State is yet to be constructed. It is therefore hoped that it will be critically scanned by all interested in agricultural progress and in the increase of emigration to the State, and that all faults of omission, commission or inaccuracy be noted, and with comments and additional information be communicated to the writer, in order that they may be put on record for incorporation into a subsequent corrected and amplified edition of the work. To persons able and

willing to correct the outlines of the several regions laid down on the map, or to give the limits of any additional subdivisions worthy of note, blank maps of the corresponding portions of the State will be sent for the platting of such information, to be incorporated in a revised map, drawn on a larger scale. All such contributions are earnestly solicited and welcomed, and due credit will be given for them in the reports of the College of Agriculture.

It is quite likely that some counties or regions of the State may feel aggrieved in having their agricultural advantages underrated. To these it can only be said that the best of all available information has been drawn upon, and that if incorrect, it rests with their people to furnish fuller and more correct information, which will be promptly elaborated and published. It would be more desirable and satisfactory to have such information gathered by experts in the field; but so long as no funds are available for the purpose of travel, and the writer's time is fully occupied by duties at the University, such personal exploration is, as a rule, impracticable, and he must rely on the voluntary co-operation of the agricultural public. E. W. HILGARD.

Berkeley Cal., May 1, 1884.